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STARLAKE-BISTI COAL REGION

Accelerated Intensive Wilderness Inventory

Department of Interior
Bureau of Land Management

Albuquerque District

August-1979

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Wilderness Invensive Inventory
Bureau of Land Management
Albuquerque District
July 1979

Inventory Unit NM-010-57
Bisti

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UNIT NO. NM-010-57

NAME OF AREA: Bisti

Inventory Unit NM-010-57, Bisti, meets all the requirements necessary to receive the recommendation of Wilderness Study Area. It exhibits the fundamental wilderness characteristics of size, naturalness and the opportunity for solitude and/or primitive and unconfined recreation. In addition, significant supplemental values have been documented, enhancing these basic characteristics.

WILDERNESS INTENSIVE INVENTORY

UNIT NO. NM-010-57

NAME OF AREA: Bisti

Explain by a concise narrative the following essential wilderness characteristics.

1. SIZE

Narrative:

Although the acreage of I.U. NM-010-57, Bisti, is less than 5,000 acres (3,520 acres), the nature of the topography makes practicable its preservation and use in an unimpaired condition. The north 3/4 of Bisti is comprised of Fruitland/Kirtland shale formation which consists of "alternating layers of sandstones and gray, tan and olive verigated shales."[1] Outcrops of the Fruitland/Kirtland formation are exposed as badlands and characterized by highly rugged terrain. These outcrops take the form of unique spires, towers, and "mushroom" formations.

This rough terrain, consituting most of the unit, inherently limits access to foot travel. The broader plains portion along the west of the Bisti does invite vehicular access. This, however, can be controlled with sound management practice.

The SW 1/4 of NM-010-57 consists of sandy, rolling grasslands.

Summary: 1. Does the area have at least 5,000 acres of contiguous land and is it of sufficient size to make practicable its preservation and use in an unimpaired condition?

YES (NO) (circle one)

1 Kues, Barry S., Froehlich, Jeffry W., Schiebout, Judith A., Lucas, Spencer G: Paleontological Survey, Resource Assessment, and Mitigation Plan for the Bisti-Star Lake Area, N.W. New Mexico, Bureau of Land Management, Albuquerque, N.M.: 10/31/77.

2. Does the area have sufficient size to make practicable its preservation and use in an unimpaired condition?

YES NO (circle one)

SIGNATURE: Martin R. Bottom DATE: 7-13-79

Angela W. West DATE: 7/13/79

2. NATURALNESS

Narrative:

The imprint of man is substantially unnoticeable. Each intrusion identified is either low impact, or of a reversible nature by hand tools. The following is a discussion of each intrusion and its relative impact on the element of naturalness. Each identified letter refers to the location of the intrusion plotted on the corresponding field maps.

Intrusion-A is a windmill located in the extreme south of the inventory unit. Its visual impact is buffered by the rolling nature of the topography immediately surrounding it. In addition, it cannot be viewed from the badlands area to any degree, making its cumulative impact on the entire unit negligible.

Intrusion-B and intrusion-C, earthen dams, are small, silted in and in the process of revegetating. No water was evident on the date of field verification. The process of returning to a natural condition can be expected to continue, barring human interference.

Intrusion-D is nine drill sites scattered throughout the unit. Each site impacts an area approximately 3'/3' and consists of a small drill hole and "mud" residue. Additional moisture and the resulting erosion can be expected to mitigate this impact. Those drill sites located in the grassier, more rolling topography to the southwest, create minimal contrast. Although sparsely vegetated in the badlands, little contrast with the surrounding environment is evident here. The "mud" residue blends in well with the subdued grays and tans which dominate much of the unit. The route affiliated with the drill sites in T. 24 N., R. 13 W., Sections 28 and 29, have been successfully rehabilitated by the operator to the standards set by the Wilderness Interim Management Policy and the BLM's surface protection requirements.

Intrusion-F, scattered trash, is located primarily along the south boundary and easily cleared by hand.

Vehicular Route Analysis

Route-1 and Route-2 appear to have been used for access to intrusion-B and intrusion-C, earthen dams. They are presently returning to a natural condition with no mitigation efforts by man. Both are well vegetated, exhibited no maintenance, nor any recent travel.

Route-3 and Route-4 associated with intrusion-D, drill site, have been discussed under mitigation of intrusion-D. Route-5 is the primary access way utilized by visitors. This way exhibits continual vehicular impacts. While these impacts are noticeable within the immediate area, they do not detract from the overall naturalness of the Bisti. A reduction in vehicular traffic on this way would significantly reduce the existing impacts of the way

Conclusion

Inventory Unit NM-010-57, Bisti, generally appears to be natural. This factor could be enhanced by the minor mitigation previously suggested for those existing man-made intrusions.

It is helpful to note that it is the cumulative impact of man on the entire inventory unit that is the focal point when discussing the characteristic, naturalness.

The Bisti is sparsely impacted and all existing intrusions are well buffered by their surrounding vegetation and topography. No single impact has an inordinate visual impact from a north, south, east, or west viewscape. When viewing the unit as a whole, Bisti generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable.

Summary: Does the area generally appear to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable.

YES NO (circle one)

SIGNATURE: Martin R. Bolton DATE: 7-13-79

Angela W. West DATE: 7/13/79

UNIT NO. NM-010-57

3. OUTSTANDING OPPORTUNITY FOR SOLITUDE OR A PRIMITIVE AND UNCONFINED RECREATION ANALYSIS

A. SOLITUDE

Narrative:

Regardless of the size, Bisti inventory unit offers an outstanding opportunity for solitude. The topography of the majority of the unit consists of a profusion of compact, rolling hills, broken by narrow washes. These washes are filled with unusual "mushroom" formations and spires. This varied, rugged topography inherently provides an excellent buffer between potential user groups. Sparse vegetation in no way deters from this characteristic but simply enhances the rare quality of the Bisti solitude experience.

Any user group entering the Bisti from the south boundary is offered a strong feeling of solitude. The abrupt transition from rolling topography to an expansive overview of desolate, highly eroded badlands is a significant contribution to the solitude factor.

Bisti definitely affords an individual the opportunity to avoid the sights, sounds and evidence of other people in the inventory unit.

Summary: Does the area have outstanding opportunities for solitude?

YES NO (circle one)

SIGNATURE: Martin R. Botham DATE: 7-13-79

Angela W. West DATE: 7/12/79

UNIT NO. NM-010-57

B. PRIMITIVE AND UNCONFINED RECREATION

Narrative:

The rugged, broken badlands dominating the Bisti provides an unusual primitive and unconfined type of recreation. Unique hiking, riding, photographic experiences exist throughout the unit. It is the rare nature of the badlands themselves which serves as the catalyst for this outstanding experience. Sightseeing associated with the supplemental values inherent within the Bisti are abundant. Please refer to the Supplemental Values portion of this document for further clarification of the sightseeing potentials.

Summary: Does the area have outstanding opportunities for a primitive and unconfined type of recreation?

YES NO (circle one)

SIGNATURE: Martin R. Bolden DATE: 7-13-79

Angela W. Watt DATE: 7/12/79

4. SUPPLEMENTAL VALUES

Narrative:

Existing supplemental values include scenic, scientific and educational opportunities.

Scenic

The unique geology of Bisti and thus its outstanding scenic quality, is provided by soft, unconsolidated sediments which have eroded into a variety of "toadstool" and spire formations. The SE 1/4 of Sec. 33 (T. 24 N., R. 13 W.) is a particularly scenic area, and typical of the pockets of badlands relief found throughout much of the unit. As described in the Kues report, references in the Size portion of this document, this area consists of three separate beds of hard, white to light tan sandstone, which exhibit thin, hard, maroon concretionary sandstones, capping verticle pinnacles of white sandstone. The unit's overall effect has been described as a moon-scape. It is most certainly an unusual scenic attraction.

Scientific and Educational

The west side of the Bisti unit contains some of the best samples of the lower part of the Fruitland-Kirtland formation, near Hunter Wash, making it highly unique in geologic terms.

The paleontological values of the Bisti have been well documented in the BLM Report entitled Paleontological Survey, Resource Assessment and Mitigation Plan for the Bisti-Star Lake Area, N.W. New Mexico. Briefly, the area contains fossils of all kinds, including large dinosaur bones, both as parts of articulated skeletons and in smaller concentrations. Vertebrates include turtle, crocodile, and fish remains. Invertebrates consist of freshwater bivalves and gastropods and gar scales. In addition, concentrations of plant leaf and branch remains are located within Bisti. Petrified wood, including trunks and large logs are common throughout the area.

The educational potential provided by this high concentration of scientific values cannot be underestimated when examining the Bisti's supplemental values.

Summary: Does the area contain ecological, geological, or other features of scientific, educational, scenic, or historical value?

YES NO (circle one)

SIGNATURE: Martin R. Botkin DATE: 7-13-79

Angela J. Wright DATE: 7/13/79

UNIT NO. NM-010-57

5. POSSIBILITY OF CERTAIN AREAS RETURNING TO A NATURAL CONDITION

Narrative:

The Bisti inventory unit is primarily natural. Minimal rehabilitation, as suggested under the section of this report discussing naturalness, would simply enhance an already existing condition. All imprints of man's work are either substantially unnoticeable or can be eliminated by either natural processes or by hand labor.

Summary: If the area or island were to become a wilderness area, could the imprint of man's work be reduced by either natural processes or by hand labor to a level judged to be substantially unnoticeable?

YES NO (circle one)

SIGNATURE: Marland R. Bothen DATE: 7-13-79

Angela W. Wirt DATE: 7/13/79

WILDERNESS INVENTORY
WILDERNESS SUMMARY SHEET

I. LOCATION

Inventory unit No. (area or island, grouping of areas or islands): NM-010-57

Areas/Island name: Bisti

District: Albuquerque State: New Mexico

II. SUMMARY:

A. Results of wilderness characteristics analysis.

1. Does the area or island appear to be natural? X yes ___ no
2. Does the area or island offer outstanding opportunities for solitude or a primitive and unconfined type recreation? X yes ___ no
3. Does the area meet any of the size requirements? X yes ___ no
4. Does the area or island have supplemental values? X yes ___ no

B. Resulting map.
Attach a map showing inventory unit, roads, area with possibility of returning to a natural state, recommended boundary of wilderness study area (WSA).

III. RECOMMENTATION

Check one:
X Area or island should be approved as a WSA.
___ Area or island does not qualify for wilderness study.
___ A portion of the area(s) or island(s) should be approved as a WSA for further study and reported to the President. The restrictions imposed by Section 603 will no longer apply (reference to map) on the remainder of the area.

IV. APPROVAL

A. District Manager: L Paul Applegate

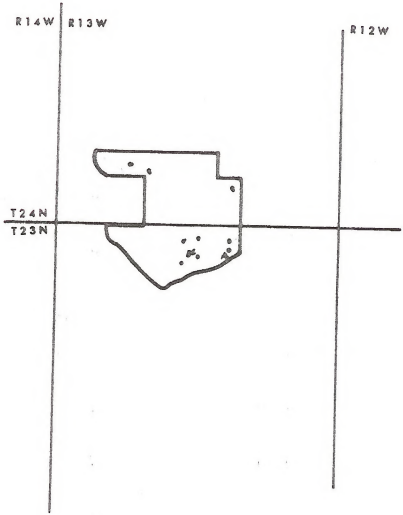
Date: 7-17-79

B. State Director: Larry L. Woodard

Date: 7-26-79

U.S. GOVERNMENT PRINTING OFFICE : 1978 O - 274-430

APPENDIX



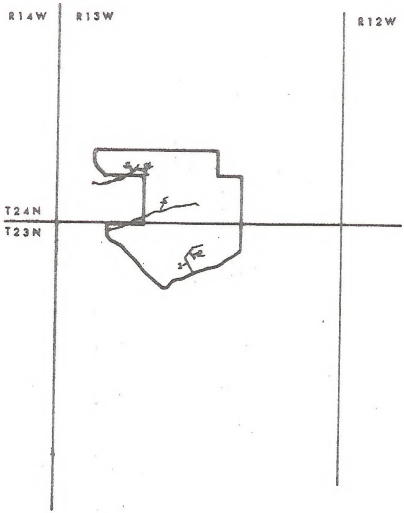
LOW IMPACT INTRUSIONS

NM-010-57 INVENTORY UNIT

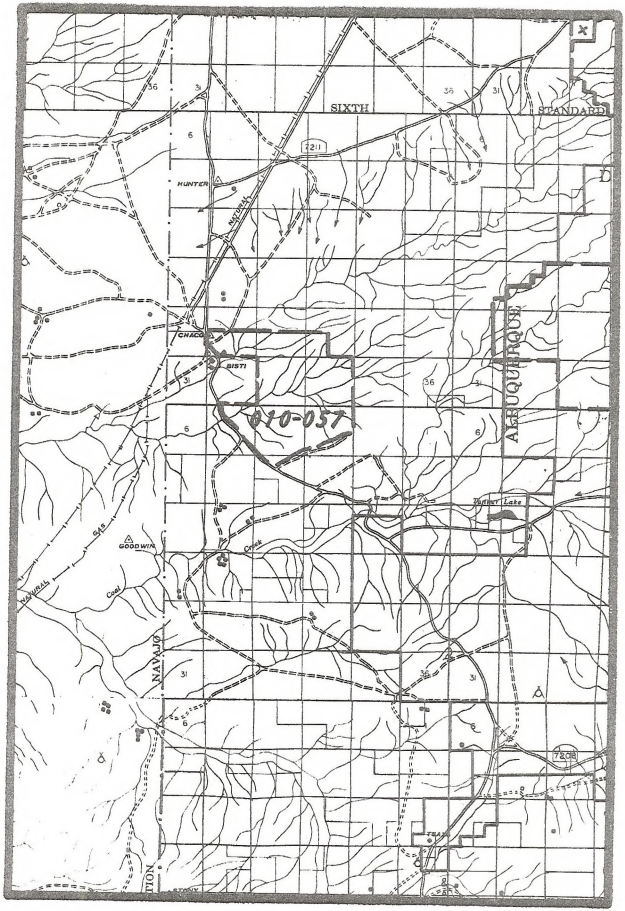
SCALE: 1/2"-1 MILE

DATE: 7-15-79

UPDATE



VEHICULAR ROUTES
NM-010-57 INVENTORY UNIT
SCALE: 1/2"-1 MILE
DATE: 7-15-79


SIXTH
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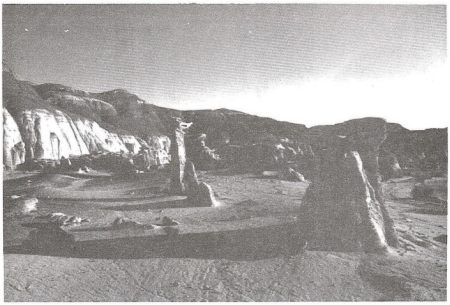
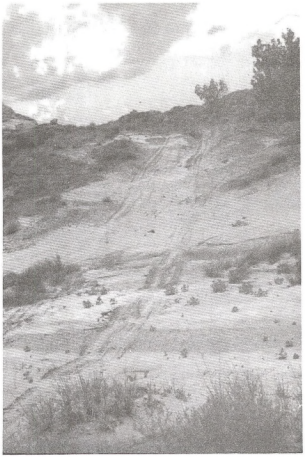
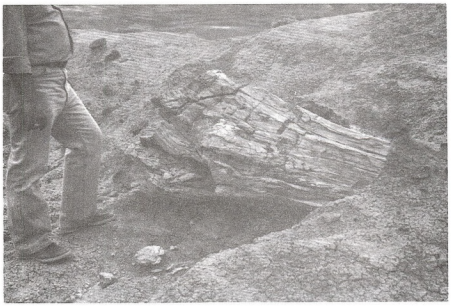
SCENIC QUALITY



TYPICAL TOPOGRAPHY



SAMPLE OF ROUTE CLASSIFIED AS A WAY



TYPICAL OF PETRIFIED LOGS FOUND THROUGHOUT BISTI

Wilderness Intensive Inventory
Bureau of Land Management
Albuquerque District
July 1979

Inventory Unit NM-010-4
De-na-zin

Inventory Unit NM-010-4, De-na-zin, meets all the requirements necessary to receive the recommendation of Wilderness Study Area. It exhibits the fundamental wilderness characteristics of size, naturalness and the opportunity for solitude and/or primitive and uncondined recreation. In addition, significant supplemental values have been documented, enhancing these basic characteristics.

UNIT NO. NM-010-4

Explain by a concise narrative the following essential wilderness characteristics:

1. SIZE

Narrative:

Inventory Unit NM-010-4, De-na-zin, is approximately 24,240 acres, and is of sufficient size to make practicable its preservation and use in an unimpaired condition.

De-na-zin is comprised of the Fruitland/Kirtland shale formation which consists of "alternating layers of sandstones and gray, tan, and olive verigated shales."[1] The western section of De-na-zin, near the heads of Willow Wash and Alamo Wash is representative of the upper portions of the Fruitland/Kirtland shale formation. This consists of flat top mesas, capped by Ojo Alamo Sandstone. The unit is cut by Alamo Wash and Willow Wash in the center and north sections, and by De-na-zin Wash in the south portion. These major washes and their tributaries wind among rugged badlands exposing green and gray siltstone and shale. Alamo Mesa is located in the southwest section of the unit, skirted by rolling badlands and sparsely vegetated flats. The northern one-fourth of De-na-zin progresses from badlands topography into rolling grasslands.

Summary: 1. Does the area have at least 5,000 acres of contingucus land and is it sufficient size to make practicable its preservation and use in an umimpaired condition?

YES NO (circle one)

SIGNATURES: Mark P. Butler DATE: 7-13-79

Angela M. Albert DATE: 7/13/79

1. Kues, Barry S., Froehlich, Jeffry W., Schiebout, Judith A., Lucas, Spncer G; Paleontological Survey, Resource Assessment, and Mitigation Plan for the Bisti-Star Lake Area, N.W. New Mexico, Bureau of Land Management, Albuquerque, N.M.; 10/31/77.

2. NATURALNESS

Narrative:

The imprint of man is substantially unnoticeable. Each intrusion identified is either low impact, or of a reversible nature by hand tools. The following is a discussion of each intrusion and its relative impact on the element of naturalness. Each identified letter refers to the location of the intrusion plotted on the corresponding field maps.

Intrusion-A consists of a shot hole, and "mud" residue, located in a small drainage among the hilly badlands at the base of Alamo Mesa. The area affected is approximately two inches in circumference. This minimal impact can be expected to be eliminated with the aid of natural erosion.

Intrusion-B is a small earthern stock dam. It contained water on the date of field checking and exhibited signs of current use and maintenance. Intrusion-B is located approximately 1/3 of a mile north of the south boundary in a flat, sparsely vegetated wash. If not maintained the dam would erode and eventually return to a natural condition.

Intrusion-C consists of two drill holes and an old "mud-pit" located in a small, flat, grassy section in approximately the center of the unit. The strongest impact is two pipes approximately two feet in height, which could be removed by manual means. The small impact remaining would return to a natural condition.

Intrusion-D and Intrusion-E are fencelines. Their impacts are considered minimal as fencelines are presently accepted in existing wilderness areas.

Intrusion-F consists of a locked gate which closes Route-16. It could be removed by manual means if deemed necessary. The gate is presently noticeable but cannot be considered significant when viewing its overall impact on the entire inventory unit.

The northern section of NM-010-4, as noted on the corresponding map is highly impacted by Navajo occupancy. Those areas marked, are presently being recommended for exchange and have not been considered as part of the inventory unit's evaluation on the characteristic of naturalness.

Intrusion-G is a pipeline which now constitutes the units boundaries in T. 25 N., R. 11 W., Sections 34 and 35; T. 24 N., R. 11 W., Section 2.

Vehicular Route Analysis

Field checks revealed that all the identified routes qualify as ways, according to the definition utilized in the Blue Book. All routes would return to a natural condition if closed.

Route-1 is located in the southwest portion of NM-010-4, south of Alamo Mesa. It appears to be utilized for access to an earthern dam just outside of the south boundary in rolling topography, skirting the badlands just to the north.

Route-3 services an earthern dam, Intrusion-B, presently in use.

Route-4 extends from the central south border of the unit approximately two miles north across a grassy mesa top.

Route-5 is an extention of Route 4, traversing primarily badland topography. This route loops to the north and then to the southeast, ending at the same point at which it begins.

Routes-1, -3, -4, and -5 all received minimum maintenance, illegally. The party responsible has been trespassed by the BLM, and an agreement on rehabilitation has been reached. All routes have been classified as ways, on this basis.

Route-2 extends across sparsely vegetated, flat topography, and winds among the badland foothills south of Alamo Mesa. The route is barely visible at times, and has been stubstantially mitigated by natural erosion. Mineral exploration is suspected as its original purpose.

Route-6 extends (approximately 1/2 mile) west from the main road constituting the western boundary of the unit. It traverses rolling grass land, and is well vegetated. No apparent purpose was noted.

Route-7 and Route-8 originate from the boundary road. Both proceed into the unit approximately 3/4 mile, and concludes at the top of an overlook which views the De-na-zin wash, below.

Routes-9 and -10 are short tangents which extend off of Route -11, and stop approximately 1/4 mile. Both qualify as ways.

Route-11 is presently utilized as access to an inholding. However, no evidence of continued maintenance was noted.

Both Route-12 and Route-13 are trails branching off of Route-11. Route-12 swings west and fades out. Route-13 proceeds north, connecting with Route 14, and is classified as a way. No evidence of maintenance was noted on any of these.

Route-15 heads south out of the inholding, off of Route-11. It concludes overlooking badlands to the west after winding across a grassy mesa top. No maintenance was evident.

Route-16 heads northwest off of Route-11, making its way across badlands topography and out of the inventory unit. Again, no maintenance was evident.

The north portion of NM-010-4 as stated earlier, is impacted by Navajo occupancy. Associated with the occupancy is an extensive network of ways, many barely discernible. The general topography is rolling and grassy. The sections impacted include: T. 25 N., R. 11 W., Sections 19, 29, 30, 31, 32; T. 25 N., R. 12 W., Sections 22, 23, 24, 25, 26, 27, 28, 35, 36.

Conclusion

Inventory Unit NM-010-4 generally appears to be natural. This factor could be enhanced by the minimal mitigation previously suggested for those existing man-made intrusions.

It is helpful to note that it is the cumulative impact of man on the entire inventory unit that is the focal point when discussing the characteristic naturalness.

The dominant impact within De-na-zin is the Trespass routes noted in the Vehicular Route Analysis. As stated, mitigation has been negotiated through the BLM Lands and Minerals trespass Policies. All other impacts are well buffered by the surrounding vegetation and topography. No single impact has an inordinate visual impact from a north, south, east or west viewscape. The large size and high concentration of rugged terrain within this unit supports the conclusion that De-na-zin generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable.

Summary: Does the area or island generally appear to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable?

YES NO (circle one)

SIGNATURE Martha R. Bolton DATE: 7-13-79

Angela L. Wheat DATE: 7/13/79

UNIT NO. NM-010-04

3. OUTSTANDING OPPORTUNITY FOR SOLITUDE OR A PRIMITIVE AND UNCONFINED RECREATION ANALYSIS

A. SOLITUDE

An opportunity for solitude means the potential for the user to experience solitude must be present in at least one portion of the inventory unit. Since the majority of the unit is comprised of broken, rough, badland topography, the potential for a variety of user groups to avoid the sights, sounds and evidence of one and other cannot be disputed. The large size of De-na-zin is also a strong enhancing factor in favor of the wilderness characteristic, solitude.

Summary: Does the area have outstanding opportunities for solitude?

YES NO (circle one)

SIGNATURE: Martha R. Bolton DATE: 7-13-79

Angela L. Wert DATE: 7/13/79

UNIT NO. NM-010-04

B. PRIMITIVE AND UNCONFINED RECREATION

Narrative:

Like solitude, the opportunity to experience primitive and unconfined types of recreation need only appear in one area of the inventory to be considered viable. This characteristic is, however, inherent throughout the majority of De-na-zin. The recreational potential is derived primarily from the unusaual nature of the topography. The hiking, riding, and photographic possibilities are centered in a higher concentration in the southern 2/3 of the unit. Each major wash and its tributaries offers an unusual visual experience not be be found in the majority of public domain. Sightseeing associated with the supplemental values of the unit include geologic and paleontologic attractions. Both petrified wood and a variety of fossils are abundant.

Summary: Does the area have outstanding opportunities for a primitive and unconfined type of recreation?

YES NO (circle one)

SIGNATURE: [illegible] DATE: 7-13-79

[illegible] DATE: 7/12/79

UNIT NO. NM-010-4

4. SUPPLEMENTAL VALUES

Narrative:

Existing supplemental values include scenic, scientific and education opportunities.

Scenic

The majority of De-na-zin consists of broken, rough badlands. The sandstone capped bluffs and mesas intermingled with the spires and mushroom formations give this inventory unit a scenic appeal distinctly its own. A wide variety of viewscapes are provides by mesa tops, intricately sculptured bluffs, and rolling, alluvial washes. The delicate coloration of these formations ranges from creams and tans, to strikingly banded maroons and purples.

Scientific and Educational

From a paelontological standpoint, De-na-zin is most important. It contains the transition from the Fruitland/Kirtland formation, dinosaur dominated, to the Ojo Alamo and Nacimiento formations which were mammal dominated. This transition zone is one of the few places in the world where one can document the final extinction of the dinosaur. The paeontological values in NM-010-4 extend the geographical range of plants, vertebrates, and invertebrates. De-na-zin exhibits a different community of life forms that coexisted during the Cretaceous Age, making it most valuable from a paelontological standpoint.

In addition, NM-010-4 is presently considered the paelontological magnetic stratigraphy reference section for the entire world. Work done by Butler and Linsey have sampled the magnetic lines within the unit and hope to determine from this data, what the magnetic fields consisted of during this timeframe.[2]

2. For further information refer to: Butler, R.F., and others, 1977, Magnetostratigraphy of the Cretaceous-Tertiary boundary in the San Juan Basin, N.M.; Nature, U.267, p. 318-323.

Paleontologic values have been carefully documented in the BLM study sited in the Size section of this report, commonly referred to as, the Kues Report.

Summary: Does the area contain ecological, geological, or other features of scientific, educational, scenic, or historical value?

YES NO (Circle one)

SIGNATURE: [illegible] DATE: 7-13-79

[illegible] DATE: 7/13/79

UNIT NO. NM-010-04

5. POSSIBILITY OF CERTAIN AREAS RETURNING TO A NATURAL CONDITION

Narrative:

The De-na-zin inventory unit is primarily natural. Minimal rehabilitation, as suggested under the section of this expert discussing naturalness, would simply enhance an already existing condition. All imprints of man's work are either substantially unnoticeable or can be eliminated by either natural processes or by hand labor.

Summary: If the area or island were to become a wilderness area, could the imprint of man's work be reduced by either natural process or by hand labor to a level judged to be substantially unnoticeable?

YES NO (circle one)

SIGNATURE: [illegible] DATE: 7-13-79

[illegible] DATE: 7/13/79

WILDERNESS INVENTORY
WILDERNESS SUMMARY SHEET

I. LOCATION

Inventory unit No. (area or island, grouping of areas or islands): 04

Areas/Island name: De-na-zin

District: Albuquerque State: NM

II. SUMMARY:

A. Results of wilderness characteristics analysis.

1. Does the area or island appear to be natural? X yes ___ no
2. Does the area or island offer outstanding opportunities for solitude or a primitive and unconfined type recreation? X yes ___ no
3. Does the area meet any of the size requirements? X yes ___ no
4. Does the area or island have supplemental values? X yes ___ no

B. Resulting map.
Attach a map showing inventory unit, roads, area with possibility of returning to a natural state, recommended boundary of wilderness study area (WSA).

III. RECOMMENTATION

Check one:
X Area or island should be approved as a WSA.
___ Area or island does not qualify for wilderness study.
___ A portion of the area(s) or island(s) should be approved as a WSA for further study and reported to the President. The restrictions imposed by Section 603 will no longer apply (reference to map) on the remainder of the area.

IV. APPROVAL

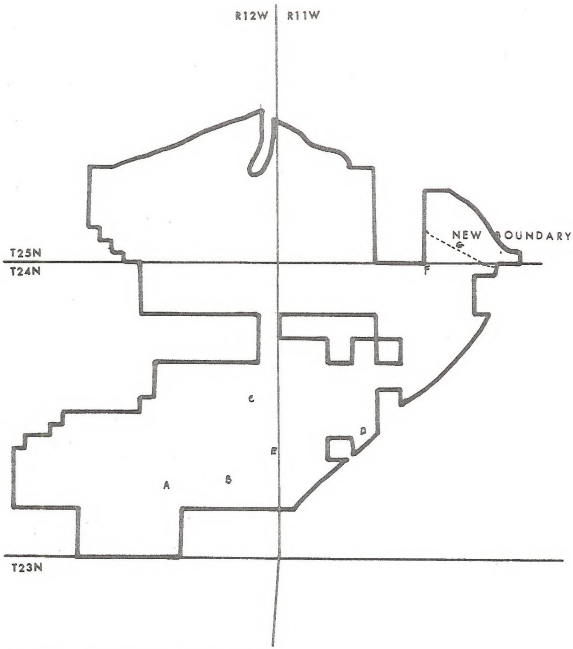
A. District Manager: L. Paul Applegate

Date: 7-17-79

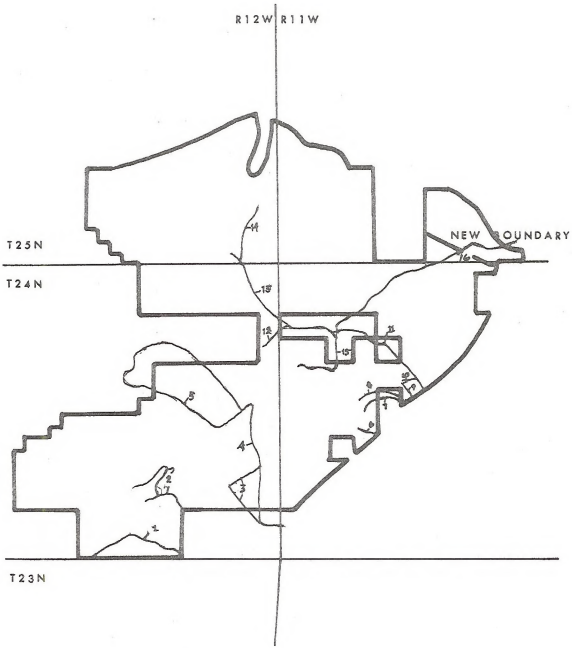
B. State Director: Larry L. Woodard

Date: 7-26-79

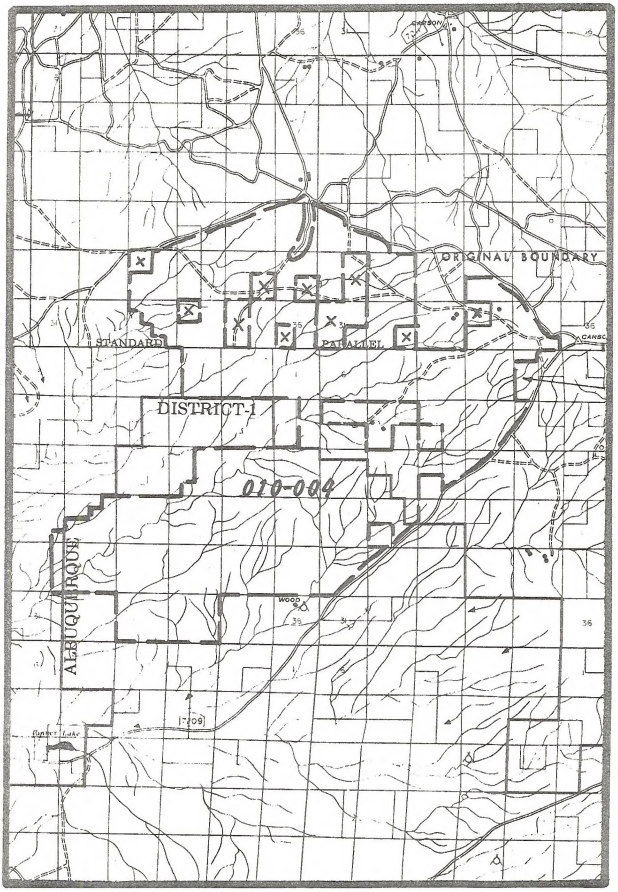
U.S. GOVERNMENT PRINTING OFFICE : 1978 O - 274-430

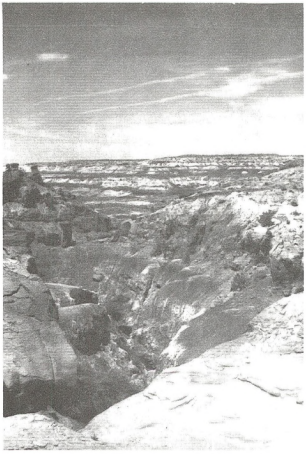


LOW IMPACT INTRUSIONS
NM-010-04 INVENTORY UNIT
SCALE: 1/2"-1 MILE
DATE: 7-15-79
UPDATE:



VEHICULAR ROUTES
NM-010-4 INVENTORY UNIT
SCALE: 1/2"-1 MILE
DATE: 7-15-79

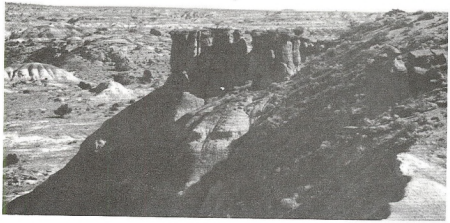

ORIGINAL BOUNDARY
STANDARD
PARALLEL
DISTRICT-1
010-004
ALBUQUERQUE
WOOD
7709



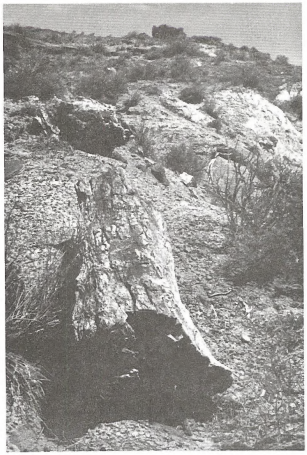
SCENIC QUALITY

SAMPLE OF A ROUTE CLASSIFIED AS A WAY
(POWERLINE OUTSIDE OF I.U.)

SAMPLE OF TRESPASS ROUTE



SCENIC QUALITY



TYPICAL OF PETRIFIED WOOD FOUND THROUGHOUT UNIT

Wilderness Intensive Inventory
Bureau of Land Management
Albuquerque District
July 1979

Inventory Unit NM-010-9
Ah-shi-sle-pah

UNIT NO. NM-010-09

NAME OF AREA: Ah-shi-sle-pah

Inventory Unit NM-010-9 Ah-shi-sle-pah, meets all the requirements necessary to receive the recommendation of Wilderness Study Area. It exhibits the fundamental wilderness characteristics of size, naturalness and the opportunity for solitude and/or primitive and unconfined recreation. In addition, significant supplemental values have been documented, enhancing these basic characteristics.

WILDERNESS INTENSIVE INVENTORY

UNIT NO. NM-010-9

NAME OF AREA Ah-shi-sle-pah

Explain by a concise narrative the following essential wilderness characteristics:

1. SIZE

Narrative:

Inventory Unit NM-010-9, Ah-shi-sle-pah, is approximately 7,122 acres, and is of sufficient size to make practicable its preservation and use in an unimpaired condition.

Ah-shi-sle-pah is comprised of Fruitland/Kirtland shale formation which consists of "alternating layers of sandstones and gray, tan and olive verigated shales."1/ Outcrops of the Fruitland/Kirtland formation are exposed as badlands and characterized by highly rugged terrain in the form of unique spires and "mushroom" formations. The Ah-shi-sle-pah Wash bisects the center of the unit, providing rolling topography with intermittent drainages. The south portion of Ah-she-sle-pah becomes more open and rolling and supports heavier concentrations of shortgrass. This same topography and vegetation comprises a narrow border of NM-010-9 along the W. boundary, as the unit drops into the more rugged, central badlands portion.

1/ Rues, Barry S.: Froehlich, Jeffry W., Schiebout, Judith A., Lucas Spencer G.; Paleontological Survey, Resource Assessment, and Mitigation Plan for the Bisti-Star Lake Area, N.W. New Mexico; Bureau of Land Management, Albuquerque, New Mexico; 10/31/77.

Summary: 1. Does the area have at least 5,000 acres of contiguous land and is it of sufficient size to make practicable its preservation and use in an unimpaired condition?

YES NO (circle one)

2. Does the area have sufficient size to make practicable its preservation and use in an unimpaired condition?

YES NO (circle one)

SIGNATURE: Michael R. Botta DATE: 7-13-79

Angela W. West DATE: 7/13/79

UNIT NO. NM-010-9

2. NATURALNESS

Narrative:

The imprint of man is substantially unnoticeable. Each intrusion identified is either a low impact, or of a reversible nature by hand tools. The following is a discussion of each intrusion and its relative impact on the element of naturalness. Each identified letter refers to the location of the intrusion plotted on the corresponding field maps.

Intrusion-A is a small trash dump (2'/1') located along the eastern boundary. The present impact is minimal, and would be easily eliminated by manual means.

Intrusion-B consists of an earthen stock pond surrounded by a fence. It is located in a flat wash, toward the center of the unit. Although not located in the rougher topography, its cumulative impact is substantially buffered from a variety of viewscapes by the badlands sections of Ah-shi-sle-pah. In addition, if not maintained, the stock pond could be expected to fill with silt and the constructed burm would erode. The fenceline is considered to have a negligible impact on naturalness. Fencelines are present in existing wilderness areas. If deemed necessary to preserve the integrity of the wilderness character within NM-010-09, the fence could be removed entirely or painted to further blend in with the surrounding environment.

Intrusion C is an old fenceline which concludes approximately 50 ft. into the unit. Again, the fenceline's existing impact is negligible and of a highly reversible nature.

Intrusion-D is an old drill site located in a grassy, rolling area close to the boundary of Ah-shi-sle-pah. Its only remnant is a rusted pipe, approximately 4' in height. Its removal would be accomplished easily by hand.

Intrusion-E and Intrusion-F are both weather gauge equipment. Intrusion-E is located on the edge of badlands formation on the eastern boundary, and Intrusion-F, in a flat section just south of the Ah-shi-sle-pah wash. Both have been painted a camouflage beige. Because of their small stature and compatible coloring, their cumulative impact is minimal. Scientific equipment is presently acceptable within existing areas.

Intrusion-G consists of several wood piles, and random dumping. Both appear to be associated with the occupancy to the west of the site (T. 22N., R. 10W., Sec. 17). They are located in a flat, grassy, plains area approximately 100 ft. from the boundary and are very visible along this narrow border of rolling topography. However, both the wood piles and dumping can be seen from a highly limited viewscape and are easily mitigated by hand tools.

Intrusion-H and Intrusion-I are two small, earthen dams located in a grassy bowl in the southwest portion of the inventory unit. Both contained water on the date of field checking. Even though they are located in a relatively flat portion, their small size provides little contrast with the surrounding environment. Intrusion-I and Intrusion-H would erode and begin returning to a natural state, if maintenance did not occur.

Intrusion-J is a fenceline bisecting the rolling, south portion of the unit. It is again, a low impact intrusion and reversible by hand tools.

Intrusion-K, random claim staking, is scattered throughout the unit in high density. Their impacts must be considered minimal, as they are easily removed by hand.

Intrusion-L is an earthen dam located in the extreme southwest portion of NM-010-9. Water was evident on the date of field checking. Although slightly larger than Intrusion-I and Intrusion-H, its existing cumulative impact is small, and could be negated entirely if not maintained.

Vehicular Route Analysis

Field checks revealed that all routes qualified as ways, according to the definition utilized in the Blue Book. All routes would return to a natural condition if closed.

Route-1 is located in the more rolling portion of the unit along the main road which previously constituted the boundary of I.U. NM-010-9. It runs for approximately a quarter of a mile, making a shallow loop off-of and onto the main road. The way is in the process of revegetating, and if closed, would easily rehabilitate. No apparent use was noted.

Route-2 is located again, in the rolling section along the main road, extends approximately 100' into NM-010-9 and fades out. No apparent use was noted.

Route-3 parallels Intrusion-C, fenceline, and ends with the fenceline approximately 50' into the unit. It exhibited no apparent use, beyond its affiliation with the fenceline.

Route-4 is located slightly to the west of Intrusion-C, fenceline, and appears to be utilized to check the weather gauge, Intrusion-E. It exhibits no maintenance, and if closed, would return to a natural condition.

Route-5 appears to have been utilized for mineral exploration. It is located in a grassy portion of the inventory unit, contiguous with the main road and extends approximately 100' into the unit. No maintenance is evident and Route-5 could be expected to return to a natural state, if closed.

Route-6 is also suspected to be affiliated with mineral exploration. It extends about 1/4 mile into the more sparsely vegetated portion of the unit, skirting badland topography and loops back to the main road.

Route-7 extends across badlands into the south edge of Ah-shi-sle-pah Wash, and is a tangent of Route 6. Its primary use appears to be to check the weather gauge equipment, Intrusion-7. No maintenance is evident, however.

Route-8 is utilized for dumping, affiliated with Intrusion-G. It is located along the grassy perimeters of NM-010-9, and would return to a natural condition if the dumping problem was eliminated.

Route-9 is a way, located in the south rolling portion of Ah-shi-sle-pah and appears to be utilized for access to the two earthen dams, Intrusion-H and Intrusion-I. No maintenance is evident.

Route-10 exhibits no maintenance and no apparent purpose. It concluded a short distance into the unit in the extreme southwest portion.

Route-11 extends northwest off of the main road. It appears to have been used for access to the abandoned occupancy located northwest of the unit in T. 22 N., R. 11 W., Section 13. No maintenance has occurred.

Conclusion

Inventory Unit NM-010-9 generally appears to be natural. This factor could be enhanced by the minor mitigation previously suggested, for those existing manmade intrusions.

It is helpful to note that it is the cumulative impact of man on the entire inventory unit that is the focal point when discussing the characteristic, naturalness.

The majority of manmade intrusions are concentrated along the east boundary, where most accessible by man. All existing

intrusions are well buffered by the surrounding vegetation and topography. No single impact has an inordinate visual impact from a north, south, east or west viewscape. When viewing the unit as a whole, Ah-shi-sle-pah generally appears to have been affectd primarily by the forces of nature, with the imprint of man's work substantially unnoticeable.

It should be noted that the eastern boundary of the unit corresponds with the western edge of the powerline right-of-way which parallels Chaco Canyon Road.

Summary: Does the area or island generally appear to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable?

YES NO (circle one)

SIGNATURES: Michael R. Bates DATE: 7-13-79

Angela W. Hart DATE: 7/18/79

UNIT NO. NM-010-9

3. OUTSTANDING OPPORTUNITY FOR SOLITUDE OR A PRIMITIVE AND UNCONFINED RECREATION ANALYSIS

A. SOLITUDE

Narrative:

As can be seen when examining the topography of the area, the majority of the unit consists of badland formations with rolling, intermittent washes. These rougher, more broken badlands provide a great opportunity for solitude. Because Ah-shi-sle-pah contains these pockets of rougher terrain, it exhibits an outstanding opportunity for solitude throughout the majority of the unit. The Ah-shi-sle-pah Wash itself, comprising the flatter and more rolling topography within the unit is surrounded by outcrop of badlands, thus providing the opportunity for the user to experience solitude in this terrain.

Ah-shi-sle-pah offers an individual the opportunity to avoid the sights, sounds and evidence of other people in the inventory unit.

Summary: Does the area have outstanding opportunities for solitude?

YES NO (circle one)

SIGNATURES: Walter R. Bates DATE: 7-13-79

Virginia Val Hunt DATE: 7/13/79

UNIT NO. NM-010-9

B. PRIMITIVE AND UNCONFINED RECREATION

Narrative:

The outstanding opportunity for primitive and unconfined recreation within NM-010-9 is keyed to the unique topography of the area. An opportunity for an outstanding, highly unusual hiking, riding and photographic experience is exclusive to the badlands portion. Sightseeing, related to the supplemental values inherent within the inventory unit, exists throughout. Petrified wood and fossils, as well as novel geologic formations provide a rich recreation resource from which to draw.

Summary: Does the area have outstanding opportunities for a primitive and unconfined type of recreation?

YES NO (circle one)

SIGNATURES: Wallace R. Bates DATE: 7-13-79

Douglas W. West DATE: 7/13/79

UNIT NO. NM-010-9

4. SUPPLEMENTAL VALUES

Narrative:

Existing supplemental values include scenic, scientific and educational opportunities.

Scenic

Ah-shi-sle-pah is comprised of broken, coarse terrain. Browns, tans, and greys are highlighted by maroon and purple pastel banding. The angular, linear nature of the spires and mushroom formations contrast abruptly with the rounded and rolling lines of the surrounding country, providing for an exceptionally scenic area.

Scientific and Educational

This semi-arid inventory unit retains geologic and paelontologic values with intrinsic educational opportunities. Petrified wood is abundant. Large dinosaur bones, numerous crocodile, dinosaur and fish teeth, early mammals, as well as turtle remains are located throughout NM-010-9.

Ah-shi-sle-pah Wash provides an outstanding sample of Kirtland-Fruitland outcrops, making it highly unique in geologic terms.

Summary: Does the area contain ecological, geological, or other features of scientific, educational, scenic, or historical value?

YES NO (circle one)

SIGNATURES: Walter E. Bates DATE: 7-13-79

Angela M. Wright DATE: 7/18/79

UNIT NO. NM-010-9

5. POSSIBILITY OF CERTAIN AREAS RETURNING TO A NATURAL CONDITION

Narrative:

An-shi-sle-pah inventory unit is primarily natural. Minimal rehabilitation, as suggested under the section of this report discussing naturalness would simply enhance an already existing condition. All imprints of man's work are either substantially unnoticeable or can be eliminated by either natural processes or by hand labor.

Summary: If the area or island were to become a wilderness area, could the imprint of man's work be reduced by either natural processes or by hand labor to a level judged to be substantially unnoticeable?

YES NO (circle one)

SIGNATURES: Martin R. Botkin DATE: 7-13-79

Angela L. West DATE: 7/13/79

WILDERNESS INVENTORY
WILDERNESS SUMMARY SHEET

I. LOCATION

Inventory unit No. (area or island, grouping of areas or islands): ____

Areas/Island name: Ah-shi-sle-pah

District: Albuquerque State: NM

II. SUMMARY:

A. Results of wilderness characteristics analysis.

1. Does the area or island appear to be natural? X yes ___ no
2. Does the area or island offer outstanding opportunities for solitude or a primitive and unconfined type recreation? X yes ___ no
3. Does the area meet any of the size requirements? X yes ___ no
4. Does the area or island have supplemental values? X yes ___ no

B. Resulting map.
Attach a map showing inventory unit, roads, area with possibility of returning to a natural state, recommended boundary of wilderness study area (WSA).

III. RECOMMENTATION

Check one:
X Area or island should be approved as a WSA.
___ Area or island does not qualify for wilderness study.
___ A portion of the area(s) or island(s) should be approved as a WSA for further study and reported to the President. The restrictions imposed by Section 603 will no longer apply (reference to map) on the remainder of the area.

IV. APPROVAL

A. District Manager: L. Paul Applegate

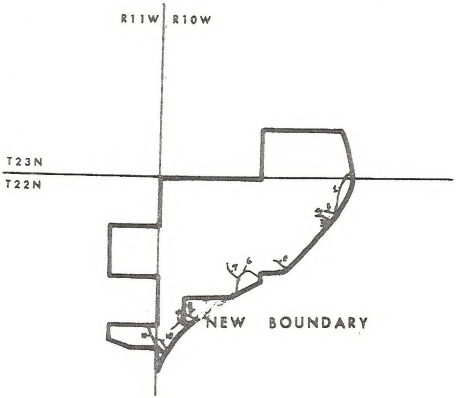
Date: 7-17-79

B. State Director: Larry V. Woodard

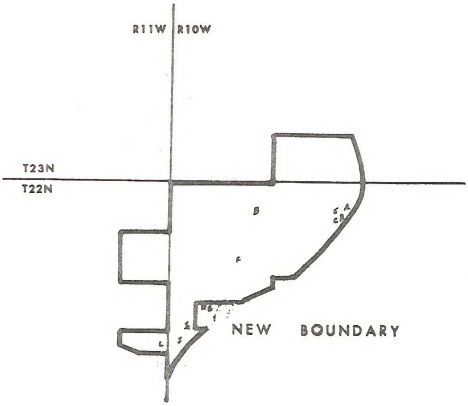
Date: 7-26-79

U.S. GOVERNMENT PRINTING OFFICE : 1978 O - 274-430

APPENDIX

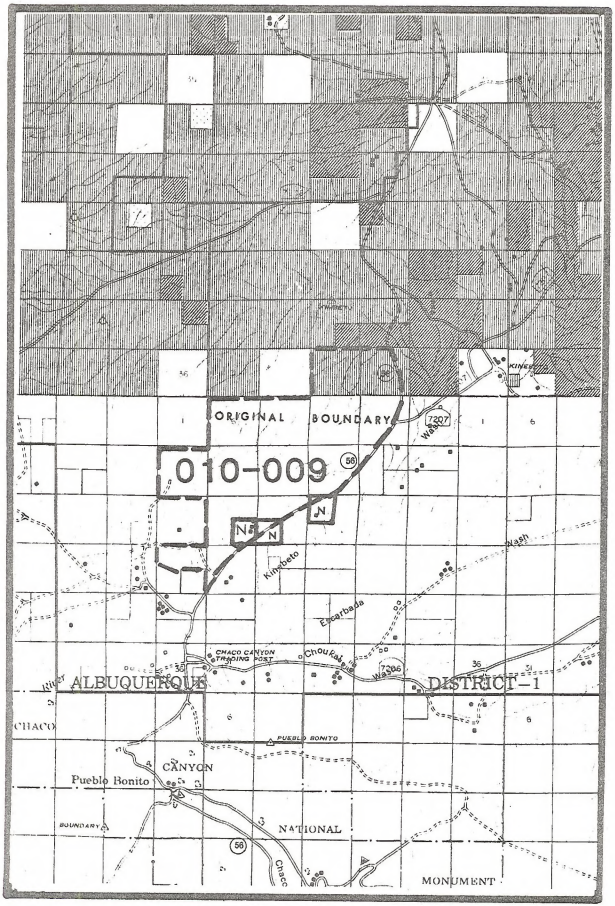


VEHICULAR ROUTES
NM-010-09 INVENTORY UNIT
SCALE: 1/2"-1 MILE
DATE: 7-15-79



LOW IMPACT INTRUSIONS
NM-010-09 INVENTORY UNIT
SCALE: 1/2"-1 MILE
DATE: 7-15-79
UPDATE:

N- PROPOSED NAVAJO EXCHANGE



TYPICAL OF BADLAND OUTCROPPING IN INVENTORY UNIT

TYPICAL OF BADLAND OUTCROPPING IN INVENTORY UNIT

TYPICAL WAY S. PORTION OF INVENTORY UNIT

VIEW ACROSS (S TO N) NM-010-09

GENERAL SCENIC

WEATHER GAGE INTRUSION

Wilderness Intensive Inventory
Bureau of Land Management
Albuquerque District
July 1979

Inventory Unit NM-010-03
Chaco Mesa

UNIT NO. NM-010-3

NAME OF AREA: Chaco Mesa

Inventory Unit NM-010-3, Chaco Mesa, does not meet all of the requirements necessary to receive a recommendation that it be designated as a Wilderness Study Area. While the unit exhibits the wilderness characteristics of size and outstanding opportunities for solitude, it does not possess the fundamental characteristic of naturalness. The inventory unit does possess supplementary values of scenic qualities and cultural resource sites. However, the possession of these supplemental values is not sufficient to overide it's lack of naturalness.

UNIT NO. NM-010-3

Explain by a Consise Narrative the Following Essential Wilderness Characteristics:

1. SIZE

Narrative:

Inventory Unit NM-010-03, Chaco Mesa, is approximately 9,600 acres, and is of sufficient size to make practicable its preservation and use in an unimpaired condition.

Chaco Mesa is comprised of the following geologic formations: Cliff House sandstone, Menefee formation and Lewis shale. The formations are characterized by gently sloping to steep and rolling uplands with intermingled mesa breaks, escarpments and benches intermixed with moderately sloping to steep canyon sides and rough broken land with narrow valley floors. Chaco Mesa is located just south of Torreon Trading Post on Highway 197 approximately 27 miles west of Cuba, New Mexico.

Summary: 1. Does the area have at least 5,000 acres of continguous land and is it of sufficient size to make practical its preservation and use in an unimpaired condition?

YES NO (circle one)

SIGNATURES: Walter R. Bottom DATE: 7-18-79

Dave Wood DATE: 7-18-79

UNIT NO. NM-010-3

2. NATURALNESS

Narrative:

Inventory Unit NM-010-03, Chaco Mesa, has not retained its primeval character and, therefore, is not natural when viewed as an entire unit. While the unit contains spectacular vistas and is generally attractive, there are far too many imprints of man's work which have cumulatively reduced the naturalness of the area. The unit contains numerous routes. These routes, classified as ways or trails, singularly do not have a great impact on the units naturalness. However, their cumulative impact upon Chaco Mesa's naturalness is one of significance. Additionally, the numerous intrusions which exist within inventory unit including four substantially noticeable retention dams and the wreckage of an airplane detract and reduce the areas cumulative naturalness. Because of the distribution of the impacts upon the area's naturalness, it is not possible to adjust the boundaries of the unit to exclude them and retain a contiguous tract of public land which is 5,000 acres in size or larger.

The following is a discussion of each intrusion and its relative impact on the characteristic of naturalness. Each identified letter refers to the location of the intrusion plotted on the corresponding field maps.

Intrusion-A is an earthen retention dam located in section 13 in Roberto Sandoval Canyon. The dam is approximately 200 feet in length, 6 feet in height and is vegetated with grass. This dam exhibited evidence of current use and maintenance. If not maintained, this intrusion would eventually erode and return to a near natural condition. However, this rehabilitation process could not be expected to occur within a short period of time. This impact is substantially noticeable.

Intrusion-B is a fenceline with a metal gate which serves as a boundary to a private 1/4 section which crosses Norberto Sandoval Canyon. Its impact is considered to be minimal since fencelines are presently accepted in existing wilderness areas.

Intrusion-C is a small earthen retention dam located in section 23 in Roberto Sandoval Canyon. The dam is approximately 50 feet in length, 4 feet in height and is sparsely vegetated with grass. If not maintained, this intrusion would eventually erode and return to a near natural condition.

Intrusion-D is a medium sized earthen retention dam located approximately an eighth of a mile southwest of Intrusion-C. This dam is roughly 100 feet in length, 6 feet in height and is

sparsely covered with grass. This intrusion exhibited some evidence of current use and maintenance. The intrusion would return to a near natural condition if not maintained. However, the timeframe for this reaction would be extensive. This impact is substantially noticeable.

Intrusion-E is a large earthen retention dam located in Section 22 of Norberto Sandoval Canyon. The dam is approximately 250 feet in length, 8 feet in height and is vegetated with grass. This dam exhibited evidence of current use and maintenance. If not maintained, natural erosion and silting could be expected to return this location within a lengthy period of time to a near natural condition. However, this 1/4 section has been earmarked for exchange because of Navajo occupancy.

Intrusion-F is two seismic shot hole locations. Each location impacts an area less than 25 feet square. There is present at each a small drill hole a surrounding grayish mud residue. Natural erosion can be expected to mitigate this impact.

Intrusion-G is an old wooden corral covered with chicken wire. This facility is located at the base of a small hill. The corral is in a state of disarray and does not appear to be either utilized or maintained. If necessary this impact could be easily removed by hand methods.

Intrusion-H is an abandoned house located along Route-7 in section 13. This intrusion impacts a viewscape corridor approximately 1/3 of a mile in length and 200 yards in width. The house timbers are in a state of decay. Time and natural processes can be expected to reduce this intrusion into a pile of rubble which could be removed with sufficient labor.

Intrusion-I is a rock foundation and partial walls of an abandoned hogan. This intrusion is located within the same viewscape corridor as Intrusion-H. If necessary this impact can be removed by hand methods alone.

Intrusion-J consists of the wreckage of an airplane which is scattered above and below a ridge line in section 25. This wreckage appears to be fairly recent. The impact of this intrusion is limited to the surrounding area because of both topographic and vegetative screening. While a portion of the wreckage could be removed by hand, several pieces are extremely bulky and heavy. These pieces could not be removed without the use of a hoist and vehicle.

Intrusion-K is a fenceline and gate which runs north and south through section 25 across Route-7. This is a low impact intrusion and could be reversible by hand methods.

Intrusion-L is an abandoned hogan located on Route-8 in section 25. While this impact is located within a fairly wide viewscape it could be removed if necessary by hand tools alone.

Intrusion-M is a major retention dam located in the southern half of section 25 in a wide, grassy drainage field. This dam, adjacent to Route-11, is approximately 200 feet in length, 8 feet in height and is covered with grass. The dam exhibits evidence of current use and maintenance. If not maintained, natural erosion and silting could be expected to return this location to a near natural condition. Once again this rehabilitation process would require an extensive period of time to occur. This impact is substantially noticeable.

Intrusion-N is the wooden foundation and partial walls of an abandoned cabin. The impact and rehabilitation potential for this intrusion is the same as Intrusion-L.

Intrusion-O is a major retention dam located in section 19. This dam is approximately 200 feet in length and 15 feet in height. The dam does not appear to be maintained. It is covered with grass and scrub brush at it's base. Access is extremely limited into its location. Consequently, rehabilitation can be expected to occur over an extensive period of time through natural processes if maintenance to the facility is denied. This impact is substantially noticeable.

Intrusion-P is a small trash dump located within the wash lending to Intrusion-O. The impact of this intrusion is minimal. Rehabilitation can be easily accomplished through the usage of hand methods.

Intrusion-Q is a series of Navajo occupancies with associated corrals and support buildings. The following parcels have been recommended for exchange and consequently omitted from the boundaries of the inventory unit: T. 18 N., R. 4 W., NMPM, section 19, SE1/4; section 20, NE1/4; section 29, N1/2; T. 18 N., R. 5 W., NMPM, section 10, SE1/4; section 15, SE1/4 and section 22, NE1/4.

Intrusion-R is a pipeline right-of-way which now becomes a portion of the inventory unit's western boundary since its impact is substantially noticeable and effects a major area which is defineable.

Intrusion-S is a fenceline and a small earthern dam located in section 19, T. 18 N., R. 5 W. Neither intrusion contributes singularly a significant impact on the areas naturalness.

Intrusion-T is three stock water dams located in section 12, T. 18 N., R. 5 W. These dams appear to be maintained. Without periodic maintenance they could rehabilitate if given time through natural processes.

Vehicular Route Analysis

Field checks revealed that all routes qualified as ways according to the definition utilized in the Blue Book. All routes could return to a natural condition if closed, however, enforcing a closure and a corresponding change in visitor usage would be difficult to acheive because of the proximity of the location to the user population.

Route-1 is the central way which runs through the center of Noberto Sandoval Canyon. Noberto Sandoval Canyon is a broad, rolling, grassy valley bordered by moderately sloping canyon walls. The way appears to be utilized for access to the retention dams (Intrusions-A, -C, -D, and -E) and as a primary access route for the majority of the inventory unit. The way does not exhibit evidence of mechanical or hand maintenance.

Route-2 is a way which branches off to the south of Route-1 and deadends in a subsidiary canyon of Noberto Sandoval. The apparent utilization of this way is for grazing management. This canyon has steep, rocky walls with a grassy, rolling valley floor.

Route-3 is a seldom used way which parallels Route-2 to the west. This way is located on top of the canyon rim. Several short trails less than an 1/8 of a mile in length each branch off to the west of Route-3. This route system appears to have been used by either hunters, wood cutters or pinyon pickers.

Route-4 is a classic way which transverses a second subsidiary canyon in sections 28, 27, 22 and 23 of Noberto Sandoval Canyon. This way crosses a valley floor which is rolling grasslands intermixed with dense pinyon-juniper stands. The canyon walls range from moderate slopes covered with pinyon-juniper to steep and rocky canyon faces. The canyon exhibits evidence of both minor grazing impacts and scattered firewood cuttings. Existing usage of this way does not appear to be heavy. When considered singularly, the associated impact of this route upon the unit's naturalness appears to be minor in scope.

Route-5 is a trail which shoots to the northwest for approximately 1/8 of a mile in section 21 off of Route-1. This way crosses a heavily vegetated canyon floor and abruptly terminates in heavy brush. There is no apparant purpose associated with this route.

Route-6 is a trail which parallels Route-1 in section 22 for approximatley 1/2 mile winding back and forth through a moderate stand of pinyon-juniper along the ridgeline above the valley floor. There are numerous woodcutting sites on either side of this route. Existing usage of the trail appears to be intermittent. No evidence of maintenance exists at any point along the trail.

Route-7 is a way which winds back and forth along a major series of ridgelines for a distance of 3 miles. This way extends from Pinyon Canyon in the north to La Saladita Canyon in the south. The trail exhibits evidence of some very old hand maintenance. Several curves have been reenforced with rock and timber in the past. However, the maintained portions are in a state of disrepair and appear abandoned. This way which is barely passable in sections overlooks a rocky canyon to the southeast; swings through dense pinyon-juniper stands; crosses two large grassy areas in section 25 and terminates in a rolling grassy valley floor surrounded by moderate to steep craggy canyon walls (La Saladita Canyon). This way appears to have been a major access route in the past for occupants, wood cutters, hunters and pinyon pickers.

Route-8 is a short way which connects Routes-9 and-7. This way transverses a grassy, rolling area and has an insignificant impact upon the unit's naturalness.

Route-9 is approximately 2 1/2 miles in length, parallels the top of the major clifflines along the southern border of the unit. This way begins in a rolling grassland and winds until termination through moderate stands of pinyon-juniper over rocky and sandy terrain. There is neither evidence of maintenance nor continual travel along its path. Some of the units most magnificent vistas are visible along its route. Because of topographic and vegetative screening the singular impact of Route-9 upon the units naturalness is miniscule.

Route-10 is approximately 1 mile in length, transverses north along the mesa top from Route-9 in sections 26 and 23 and terminates on a rocky point overlooking Novberto Sandoval Canyon. This way appears to be periodically utilized by hunters and wood-cutters. Some evidence of woodcutting is evident on either side of the way in scattered locations. Because of the areas sandy terrain, a reduction in usage may obliterate the impacts of this route upon the unit's naturalness.

Route-11 is a loop swinging south of Route-9 in section 25 for a distance of approximatley 1/2 miles before transversing east and north to reconnect with Route-9. This way is the access route for Intrusion-4. The surrounding area consists of rolling-grasslands which are primarily utilized for grazing. No evidence

of maintenance is evident at any point along its path.

Route-12 is a way which begins in the northern 1/2 of section 29 beside of a Navajo Occupancy and transverses south past Cactus Tank through a rolling, grassy valley surrounded by steep, rocky cliffs. The only apparent utilization of this way is for grazing management.

Route-13 is a trail approximately 1/8 of a mile in length which is overgrown with vegetation and leads to Intrusion-O. This trail is apparently abandoned.

Route-14 is a way branching to the north from Route-1 in section 23 and transversing east and west along the ridge line on top of the canyon. The surrounding terrain is rocky with moderate stands of pinyon-juniper. Evidence of a seismic operation is located in several spots within and adjacent to the way. This way is an apparent access route for a private 1/4 section located adjacent to it. Neither mechanical nor hand maintenance is evident along its route.

Route-15 is a way running south for approximately 1/8 of a mile from a 1/4 section proposed for exchange into a narrow canyon in section 30, T. 18 N., R. 4 W.

Route-16 is a way which runs through sections 15 and 14 for approximately 1 mile as a primary access route for occupants. This way does not exhibit evidence of mechanical or hand maintenance. Route-16 is a portion of an access system which serves the resident population.

Route-17 is a way which branches off to the east of Route-16. This route connects to the north with NM-010-3's northern boundary road. Route-17 is approximately 1/2 mile in length and follows a shallow drainage through sections 11 and 12. This way does not exhibit evidence of either mechanical or hand maintenance.

Route-18 is a maintained road which cherry stems into the inventory unit. This maintained road loops at its conclusion around an occupancy in the SE 1/4 of section 15 which has been proposed for exchange. The actual boundaries of NM-010-3 run adjacent to the western shoulder of this road.

Route-19 is a maintained road which cherry stems into the inventory unit and terminates in the same 1/4 section as Route-18. The eastern shoulder of this road also serves as a portion of the northern boundary of NM-010-3.

Conclusion

Inventory Unit MN-010-3 is not natural. The combination of the numerous intrusions and vehicular routes have significantly altered the naturalness of the area.

Summary: Does the area or island generally appear to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable?

YES NO (circle one)

SIGNATURES: Marlin R. Bolen DATE: 7-18-79

Dan Wood DATE: 7-18-79

UNIT NO. NM-010-03

3. OUTSTANDING OPPORTUNITY FOR SOLITUDE OR A PRIMITIVE AND UNCONFINED RECREATION ANALYSIS

A. SOLITUDE

Narrative:

Chaco Mesa inventory unit offers an outstanding opportunity for solitude. The topography of the majority of the unit consists of a mesa top broken by steep to moderately sloping canyons with abrupt and rocky canyon walls. This varied, rugged topography inherently provides an excellent buffer between potential user groups. Moderate to dense vegetation in no way deters from this characteristic but simply enhances the quality of Chaco Mesa's solitude experience.

Any user group entering Chaco Mesa's interior sections is offered a strong feeling of solitude. The abrupt transition from canyon valley to a mesa top and its overview of the surrounding terrain is a significant contribution to the solitude factor.

Chaco Mesa definitely affords an individual the opportunity to avoid the sights, sounds and evidence of other people in the inventory unit.

Summary: Does the area have outstanding opportunities for solitude?

YES NO (circle one)

SIGNATURE: Marlene R. Bolen DATE: 7-18-79

Alan Abrad DATE: 7-18-79

UNIT NO. NM-010-3

B. PRIMITIVE AND UNCONFINED RECREATION

Narrative:

Like solitude, the opportunity to experience primitive and unconfined types of recreation need only to appear in one area of the inventory unit to be considered viable. Chaco Mesa does not offer an outstanding opportunity for primitive and unconfined recreation. While the inventory unit does possess opportunities for hiking, backpacking, camping, hunting and photography, this diversity is neither unusal nor outstanding and may be found in numerous other areas within the Albuquerque District's public lands. No single recreation opportunity contained within the inventory unit may be characterized as outstanding.

Summary: Does the area have outstanding opportunities for a primitive and unconfined type of recreation?

YES NO (circle one)

SIGNATURE: Michael R. Orbell DATE: 7-18-79

Don Wood DATE: 7-18-79

UNIT NO. NM-010-03

4. SUPPLEMENTAL VALUES

Narrative:

Existing supplemental values include scenic opportunities and cultural resource sites.

Scenic

The majority of Chaco Mesa consists of a broad mesa top covered with moderate to dense stands of pinyon-juniper broken by broad and deep canyons and bordered by steep, rocky cliffs. A wide variety of viewscapes containing vast and spectacular vistas are available in numerous locations in both the interior and exterior of the unit. A number of the vistas in the units southern sections are some of the regions most spectacular views of Cabezon Peak and the Ignacio Chavez Land Grant.

Cultural Resources

There are numerous cultural resource sites located within the unit. These sites range from historic old cabins to prehistoric rock hunter dwellings located at the base of numerous craggy cliffs. A number of these sites have not previously been identified.

Summary: Does the area contain ecological, geological, or other features of scientific, educational, scenic, or historical values?

YES NO (circle one)

SIGNATURE: Marlin R. Butler DATE: 7-18-79

Dan Wood DATE: 7-18-79

UNIT NO. NM-010-03

5. POSSIBILITY OF CERTAIN AREAS RETURNING TO A NATURAL CONDITION

Narrative:

Chaco Mesa is not at present natural in character. While a number of impacts could be eliminated easily by hand methods or reductions in existing use patterns, the rehabilitation of the major retention dams as previously identified could not be obtained within a reasonable period of time should the area become a designated wilderness.

Summary: If the area or island were to become a wilderness area, could the imprint of man's work be reduced by either natural process or by hand labor to a level judged to be substantially unnoticeable?

YES (NO) (circle one)

SIGNATURE: Martin R. Bolin DATE: 7-18-79

Dean Wood DATE: 7-18-79

WILDERNESS INVENTORY
WILDERNESS SUMMARY SHEET

I. LOCATION

Inventory unit No. (area or island, grouping of areas or islands): NM-010-03

Areas/Island name: Chaco Mesa

District: Albuquerque State: New Mexico

II. SUMMARY:

A. Results of wilderness characteristics analysis.

1. Does the area or island appear to be natural? ___ yes X no
2. Does the area or island offer outstanding opportunities for solitude or a primitive and unconfined type recreation? X yes ___ no
3. Does the area meet any of the size requirements? X yes ___ no
4. Does the area or island have supplemental values? X yes ___ no

B. Resulting map.
Attach a map showing inventory unit, roads, area with possibility of returning to a natural state, recommended boundary of wilderness study area (WSA).

III. RECOMMENTATION

Check one:
___ Area or island should be approved as a WSA.
X Area or island does not qualify for wilderness study.
___ A portion of the area(s) or island(s) should be approved as a WSA for further study and reported to the President. The restrictions imposed by Section 603 will no longer apply (reference to map) on the remainder of the area.

IV. APPROVAL

A. District Manager: L. Paul Applegate

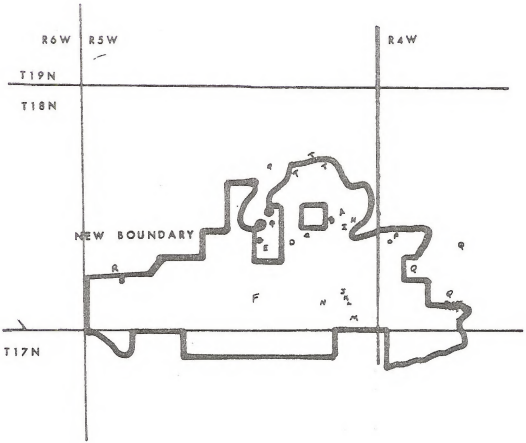
Date: 7-18-79

B. State Director: Gerry L. Woodard

Date: 7-26-79

U.S. GOVERNMENT PRINTING OFFICE : 1978 O - 274-430

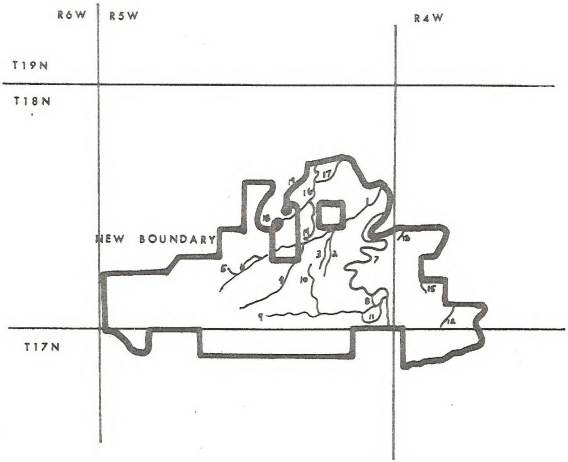
APPENDIX



INTRUSION ANALYSIS

BUREAU OF LAND MANAGEMENT	
NM-010-3	INVENTORY UNIT
SCALE: 1/2" = 1 mi.	
DATE: 7/17/79	
UPDATE:	

MARCH 16

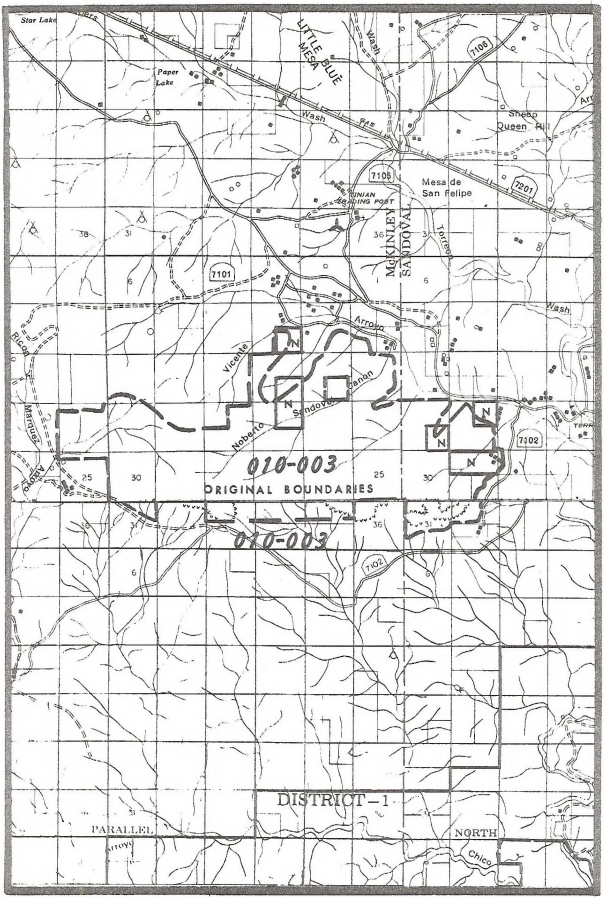


VEHICULAR ROUTES

BUREAU OF LAND MANAGEMENT
NM-010-3 INVENTORY UNIT
SCALE: 1/2" = 1 mi.
DATE: 7/17/79
UPDATE:

MOST 13

N PROPOSED NAVAJO EXCHANGE

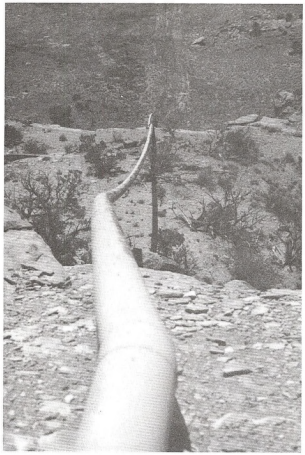


Typical Retention Dam

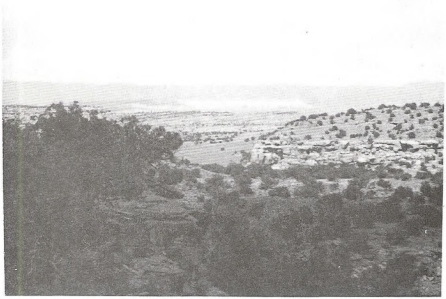
Navajo Occupancy

Typical Routes

Typical Routes



Pipeline Boundary



Scenic Vistas

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